

ABSTRACT

Disclosed is an apparatus for encoding TFCI bits in an asynchronous CDMA mobile communication system including a UE and a Node B for transmitting packet data to the UE. A TFCI bit generator creates the TFCI bits, the number of which is variable depending on an information bit ratio of the first channel to the second channel. A code length information generator generates code length information for setting a length of a codeword according to the information bit ratio. A Walsh code generator generates first to fifth basis Walsh codewords. A sequence generator generates an all-1 sequence. A mask generator generates first to fourth basis masks. First to tenth multipliers multiply the TFCI bits by the first to fifth basis Walsh codewords, the all-1 sequence and the first to fourth basis masks, respectively. An adder adds outputs of the first to tenth multipliers. A puncturer punctures a codeword output from the adder according to the code length information.